

# THE U.S. GLOBAL CHANGE RESEARCH PROGRAM

The [U.S. Global Change Research Program](#) (USGCRP) was mandated by Congress in the Global Change Research Act of 1990 (GCRA) to “assist the Nation and the world to understand, assess, predict, and respond” to processes of global change—including changes in climate, land productivity, oceans and other water resources, and ecological systems—that may alter Earth’s capacity to sustain life.<sup>1</sup> USGCRP coordinates research across 13 Federal agencies (Figure 1) to improve understanding of human-induced and natural processes of change that influence the total Earth system: the atmosphere, land, water, ecosystems, and people.

USGCRP’s membership includes agencies that produce global change science, agencies that use it to carry out their missions, and some that do both (see [Appendix I. USGCRP Member Agencies](#)). Through USGCRP, agencies work together to advance global change research that addresses national needs, inform decisions to build resilience to the impacts of global change, and deliver products mandated by the GCRA, including the National Climate Assessment. As directed by the GCRA, USGCRP also promotes international coordination on global change research, which includes providing support for activities relating to U.S. participation in international scientific assessments (see [Supporting International Global Change Research](#)).

The Fiscal Year (FY) 2021 edition of USGCRP’s annual report to Congress, *Our Changing Planet*, presents highlights of the Program’s achievements in 2019, as well as a summary of agency expenditures under USGCRP’s budget crosscut (see [Budgetary Information](#)), as required by the GCRA. USGCRP’s scope includes but is not limited to the range of agency programs implemented with funds included in the budget crosscut, and the efforts described in this document represent a subset of the overall accomplishments of the Program. The highlighted activities represent interagency collaborations that rely on coordinated investments of two or more member agencies. Note that single agency investments, including many that enable interagency accomplishments, are not typically covered in this annual report. See [Appendix I. USGCRP Member Agencies](#) for more detail on the principal focus areas related to global change research for each member agency.

**Figure 1: U.S. Global Change Research Program Member Agencies**



## IMPLEMENTING THE NATIONAL GLOBAL CHANGE RESEARCH PLAN

USGCRP’s [National Global Change Research Plan](#) and its [2017 update](#) provide a framework for advancing scientific understanding of the Earth system while strengthening capacity to answer questions critical to decision-making in a changing environment. The Program’s four strategic goals, which respond to its mandate under the GCRA, are to advance global change science, inform decisions, conduct sustained assessments, and engage key stakeholders and audiences in support of these goals, including internationally. This section highlights achievements in 2019 that support implementation of USGCRP’s goals and illustrate ongoing advances in the science of global change. Highlights are organized by overall science goals and program area. Activities undertaken in previous years are available at [globalchange.gov/explore](https://globalchange.gov/explore).